

World		
listenerList	EventListenerList	
gravity	double	
windPower	double	
windAngle	double	
clock	Timer	
ceil	boolean	
ground	boolean	
leftWall	boolean	
rightWall	boolean	
objects	List<Object2D>	
rotatingObjects	List<Object2D>	
scale	int	
width	int	
height	int	
timeStep	double	
defaultFrame	JFrame	
worldCanvas	Canvas	
strategy	BufferStrategy	
leaveShadow	boolean	
addCollisionListener(CollisionListener)	void	
removeCollisionListener(CollisionListener)	void	
fireCollisionEvent(CollisionEvent)	void	
handlerListeners()	void	
updateObject(Object2D)	void	
createWall(String)	void	
drawScale(Graphics2D)	void	
updateWorld()	void	
detectCollisions()	void	
detectCollision(RectangularObject, RectangularObject, Vector2D)	void	
detectCollision(RectangularObject, CircularObject, Vector2D)	void	
detectCollision(CircularObject, CircularObject, Vector2D)	void	
projectObject(Vector2D, RectangularObject)	Double[]	
projectObject(Vector2D, CircularObject)	Double[]	
IntervalDistance(double, double, double, double)	double	
rotateRect(RectangularObject, Graphics2D)	void	
setDefaultFrame(JFrame)	void	
addObject(Object2D)	void	
getWindPower()	double	
setWindPower(double)	void	
getWindAngle()	double	
setWindAngle(double)	void	
getTimeStep()	double	
setTimeStep(int)	void	
getDefaultFrame()	JFrame	
getGravity()	double	
setGravity(double)	void	
getClock()	Timer	
setClock(Timer)	void	
isCeil()	boolean	
setCeil(boolean)	void	
isGround()	boolean	
setGround(boolean)	void	
isLeftWall()	boolean	
setLeftWall(boolean)	void	
isRightWall()	boolean	
setRightWall(boolean)	void	
getObjects()	List<Object2D>	
getScale()	int	
setScale(int)	void	
getWidth()	int	
setWidth(int)	void	
getHeight()	int	
setHeight(int)	void	
getWorldCanvas()	Canvas	
setWorldCanvas(Canvas)	void	
isLeaveShadow()	boolean	
setLeaveShadow(boolean)	void	

Object2D		
mass	double	
location	Point2D	
forces	List<Force>	
velocity	Velocity	
fi	double	
rotationCenter	Point2D	
angularSpeed	double	
addForce(Force)	void	
setMass(double)	void	
setVelocity(Velocity)	void	
getLocation()	Point2D	
setLocation(Point2D)	void	
getRotationCenter()	Point2D	
setRotationCenter(Point2D)	void	
setForces(List<Force>)	void	
setFi(double)	void	
getMass()	double	
getForces()	List<Force>	
getVelocity()	Velocity	
getFi()	double	
getAngularSpeed()	double	
setAngularSpeed(double)	void	

Vector2D		
x	double	
y	double	
fromPoint(Point2D)	Vector2D	
fromPoint(int, int)	Vector2D	
magnitude()	double	
normalize()	void	
getNormalized()	Vector2D	
dotProduct(Vector2D)	double	
distanceTo(Vector2D)	double	
plus(Vector2D, Vector2D)	Vector2D	
minus(Vector2D)	Vector2D	
minus(Vector2D, Vector2D)	Vector2D	
multiply(Vector2D, double)	Vector2D	
multiply(Vector2D, int)	Vector2D	
equals(Object)	boolean	
equals(Vector2D)	boolean	
toString()	String	
getx()	double	
setx(double)	void	
getY()	double	
setY(double)	void	

Line2D		
start	Point2D	
end	Point2D	
m	double	
c	double	
ifInfiniteM	boolean	
intersectPoint(Line2D, Line2D)	Point2D	
getDistanceFrom(Point2D)	double	
getParallelLineDistance(Line2D)	double	
getStart()	Point2D	
isIfInfiniteM()	boolean	
getEnd()	Point2D	
getM()	double	
getC()	double	

CollisionEvent		
other	Object2D	
translation	Vector2D	
intersected	boolean	
willIntersect	boolean	
getOther()	Object2D	
setOther(Object2D)	void	
getTranslation()	Vector2D	
setTranslation(Vector2D)	void	
isIntersected()	boolean	
setIntersected(boolean)	void	
isWillIntersect()	boolean	
setWillIntersect(boolean)	void	

CircularObject		
a	int	
b	int	
center	Point2D	
getA()	int	
setA(int)	void	
getB()	int	
setB(int)	void	
getCenter()	Point2D	
setCenter(Point2D)	void	
updateCenter()	void	

RectangularObject		
width	int	
length	int	
points	List<Point2D>	
edges	List<Vector2D>	
center	Point2D	
getWidth()	int	
setWidth(int)	void	
getUpperLeftCorner()	Point2D	
setUpperLeftCorner(Point2D)	void	
getUpperRightCorner()	Point2D	
setUpperRightCorner(Point2D)	void	
getLowerRightCorner()	Point2D	
setLowerRightCorner(Point2D)	void	
getLowerLeftCorner()	Point2D	
setLowerLeftCorner(Point2D)	void	
getLength()	int	
setLength(int)	void	
getPoints()	List<Point2D>	
getEdges()	List<Vector2D>	
updateEdges()	void	
updateCenter()	void	
getCenter()	Point2D	
setCenter(Point2D)	void	

EngineStarter		
world	World	
initialDelay	int	
start()	void	
getInitialDelay()	int	
setInitialDelay(int)	void	

UpdateWorld		
actionPerformed(ActionEvent)	void	

Force		
forceX	double	
forceY	double	
getForceX()	double	
setForceX(double)	void	
getForceY()	double	
setForceY(double)	void	

Wind		

Weight		

Point2D		
posX	int	
posY	int	
twoPointDistance(Point2D, Point2D)	double	
getPosX()	int	
setPosX(int)	void	
getPosY()	int	
setPosY(int)	void	

CollisionListener		
collisionOccurred(CollisionEvent)	void	

CollisionAdapter		
ru	boolean	
collisionOccurred(CollisionEvent)	void	

Velocity		
x	double	
y	double	
getX()	double	
setX(double)	void	
getY()	double	
setY(double)	void	

Properties		
timeStep	double	
engineWait	int	
wired	boolean	